### 1. Business analyst

A Business Analyst is a professional who understands the needs of a business and helps to find the right solutions. BA talk to stakeholders, gather information, and explain it in a way that technical teams can understand. Their role is to make sure the final product or system truly solves business problems and adds value. In simple terms, a Business Analyst acts like a bridge between business people and technology experts.

### 2. Requirements Gathering

This is the process of talking to users, clients, and stakeholders to understand their needs. A BA collects information through interviews, workshops, or surveys. The goal is to know exactly what the business expects from the system.

#### 3. Requirements Analysis

After collecting requirements, a BA breaks them into smaller parts to check feasibility. This makes sure they are clear, complete, and easy to understand. It helps in avoiding confusion later during development.

### 4. Gap Analysis

Gap Analysis is a way of finding the difference between where a business is today and where it wants to be in the future. It helps to identify what is missing, what needs to be improved, or what changes are required. For example, if a company wants faster customer service but currently takes too long, the gap is the time difference. By knowing the gap, businesses can plan solutions to reach their goals.

### 5. Risk Management

Risk can be an event which can slow down the progress of the Project and sometimes cause a failure. It means looking at possible risks, checking how big their impact could be, and preparing steps to reduce or avoid them.

#### 6. SWOT Analysis

SWOT stands for strengths, weeknesses, opportunities and threats. Swot analysis is a tool used to understand a company or project situation by looking at SWOT. It helps a BA understand the business environment. This analysis is useful for planning and decision-making.

### 7. Feasibility Study

Feasibility study is nothing but possibility of doing the project with some constraints like technology, time and budget. It looks at whether the project can be done with the available time, money, technology, and people. It also checks if the project will give useful benefits to the business. In short, a feasibility study answers the question: "Can we do it, and should we do it?"

#### 8. RACI Matrix

Stakeholder analysis is process of finding out who is involved in the project and what they do. By using RACI Matrix. It explains who is responsible for doing the work, who is accountable for the results, who needs to be consulted for advice, and who should be informed about progress. This helps avoid confusion and ensures smooth teamwork.

#### 9. Business case document

A business case document is a written explanation of why a project should be done. It shows the problem, the possible solution, the benefits, the costs, and the risks. In simple words, it helps decision-makers understand if the project is valuable and worth investing in.

### 10. SDLC Methodology

SDLC methodologies are different ways of building and managing software projects. They guide how a project moves from planning to development, testing, and delivery. Some common SDLC methods are Waterfall, which is step by step; Agile, which is flexible and done in small cycles; and Spiral, which mixes planning and risk checking. In simple words, SDLC methodologies are like roadmaps that tell teams how to create software in an organized way.

### 11. Elicitation techniques

Elicitation techniques are different ways a Business Analyst uses to collect requirements from stakeholders. These techniques include interviews, workshops, surveys, brainstorming, document analysis, observation, and prototyping. Each method helps the BA understand what the users really need for the system or project. In simple words, elicitation techniques are tools to ask the right questions and gather the right information.

## 12. UML Diagrams

UML diagrams are visual drawings that show how a system works. UML stands for Unified Modeling Language, and it helps explain processes, data flow, and relationships in a simple way. Business Analysts and developers use UML to understand system design before building it. Common UML diagrams include Use Case Diagram, Activity Diagram, Class Diagram, and Sequence Diagram.

## 13. BRD (Business Requirement Document)

A Business Requirement Document (BRD) is a formal paper that explains what the business needs from a project. It focuses on the problems to be solved, the goals to achieve, and the benefits expected. The BRD is written in simple business language so that stakeholders can understand it easily.

# 14. FRD (Functional Requirement Document)

A Functional Requirement Document (FRD) is a detailed paper that explains how the system or application will work to meet the business needs. It translates the business requirements from the BRD into system functions, features, and behaviors. The FRD is more technical than the BRD and is mainly used by developers and testers.

# 15. RTM (Requirements Traceability Matrix)

RTM (Requirements Traceability Matrix) is a document that connects requirements with test cases to make sure nothing is missed during testing. It helps track whether each business or functional requirement is covered by proper design, development, and testing. In simple words, RTM is like a checklist that shows every requirement is built, tested, and verified before project delivery.

# 16. User story

A user story is a simple sentence that describes what a user needs and why, written in the form "As a [user], I want [requirement] so that [benefit]." It helps the team understand the purpose of a feature from the user's point of view.

### 17. Change Management

Business needs often change during a project. Change management ensures these changes are handled without disturbing the project too much. The BA keeps records and informs all stakeholders.

# **18.** UAT (User Acceptance Testing)

UAT (User Acceptance Testing) is the final stage of testing where actual users check the system to see if it meets their needs. It makes sure the software works as expected in real business situations. In simple words, UAT is when users test the system before it goes live to confirm it is ready to use.

#### 19. Waterfall model

The Waterfall model is a linear and sequential approach to project development. It has clear stages like requirements, design, development, testing, and deployment, which follow one after the other. Once a stage is completed, you cannot go back easily. It works well for projects with fixed requirements. It is less flexible and risky if errors are discovered late because fixing them can take a lot of time and money. Waterfall is often chosen when documentation and predictability are more important than speed or flexibility.

# 20. Agile

Agile model is a flexible way of working where the project is divided into small parts called sprints. In each sprint, a working part of the system is delivered to the users. The users give feedback after every sprint, and changes can be made easily during development. Agile is very useful when requirements are not fixed, like in mobile apps or customer-focused products. It encourages teamwork, regular communication, and customer satisfaction. Agile delivers results faster and reduces risks since testing and feedback happen all the time. But it needs strong teamwork and can be difficult to manage in very big projects.